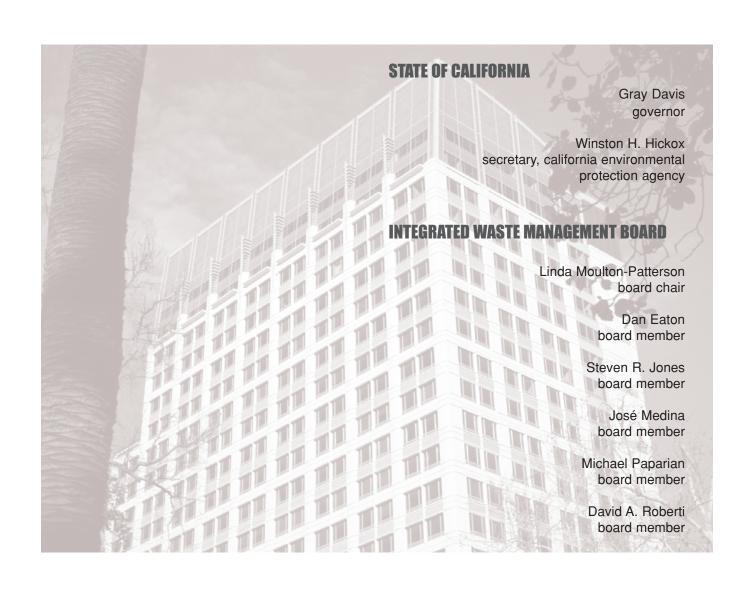
2000 Annual Report

Executive Summary



Integrated Waste Management Board



California Integrated Waste Management Board



Linda Moulton-Patterson, Chair 1001 I Street • Sacramento, California 95814 • (916) 341-6000 Mailing Address: P.O. Box 4025, Sacramento, CA 95812-4025 www.ciwmb.ca.gov



Governor

Dear Fellow Californians:

Protecting human health and California's environment is a job that will never end. Our children will judge us by what we leave behind. Each succeeding generation will look at the success of the one before. The challenge is to leave things in better shape than we found them.

Fortunately, what we know about the environment today is vastly greater than what we knew a short 10 years ago.

At the Integrated Waste Management Board (IWMB), we will soon begin assessing whether local governments met the 50 percent waste diversion mandate in 2000. Cities and counties are learning new and more effective ways to reduce waste and recycle. Children are being taught the principles of reuse and recycling at a very early age. People are paying attention and they are participating by recycling at home and at work.

In fact, waste prevention, recycling, and composting efforts by California cities and counties are truly successful. Local diversion programs kept 28 million tons of material out of landfills in 2000, a dramatic leap of 9.5 million tons—51 percent—over 1998 levels. Since 1990, Californians have diverted 167.5 million tons of usable resources from disposal.

This remarkable success is a direct reflection of the innovative and dedicated efforts of your local governments, businesses, refuse haulers, and citizens to keep reusable and recyclable materials out of our landfills.

With so many new programs coming online in recent years we have been confident that the diversion rate would continue to rise significantly. The addition of nearly 10 million tons of annual diversion in the past two years is convincing evidence of the vitality of California's new materials handling infrastructure.

At the IWMB, we practice conservation through the efficient use of resources and energy. With this in mind, we have created an expanded online version of this report as a portal to Web-available information about all of our programs. Our online report can be found at www.ciwmb.ca.gov/BoardInfo/AnnualReport/2000/.

Although this Annual Report documents the challenges and achievements of the past, we are looking to the future through the development of our new Strategic Plan and the promise of new programs such as environmental education and building "green" to use our resources efficiently and to create a healthier environment for all Californians—where they live, work, and play.

The future looks bright.

Linda Moulton-Patterson Chair

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California Environmental Protection Agency

Printed on Recycled Paper



Winston H. Hickox secretary, california environmental protection agency



From The Secretary

Californians are justly proud of our commitment to a cleaner environment. It has been expressed in a variety of ways here in Sacramento. One of the most important was Assembly Bill 939 which embodied the vision of its author (then Assembly Member) Senator Byron Sher in creating the 50 percent benchmark for diversions from the waste stream. The target date for that goal has now arrived.

The Integrated Waste Management Board has reached its goal year and it has helped California communities as they strive to reach or exceed the target. Our efforts are being noticed.

According to the 1995 and 1996 reports being formally reviewed by the IWMB, more than 60 communities have already reached or exceeded 50 percent diversion. Dozens more are in the 40 percent range. And statewide, our 2000 estimate is that 42 percent of all of California's solid waste is being diverted from landfills.

In all, approximately 167 million tons of waste have been kept out of landfills since 1990. Source reduction, grasscycling, composting, reuse, and recycling—concepts foreign to most Americans a decade ago—have become more and more commonplace.

The Waste Board is maintaining its historic focus on helping California's cities and counties continue to reach their 50 percent waste diversion requirements. At the same time, the IWMB is dealing with additional issues involving waste reduction and safety.

The IWMB's first effort is working with a number of State agencies to improve State government's commitment to recycling and buying recycled-content products.

Cal/EPA, the Waste Board, the Resources Agency, and the Department of General Services are working to institutionalize policies and procedures to support green procurement throughout State government.

The Waste Board is also working closely with Cal/EPA and other State agencies to promote green building design. Besides encouraging the use of recycled-content products in construction, green buildings are also designed to improve indoor air quality; use energy, water, and other resources more efficiently; and provide a more productive environment for employees to work.

I'm proud that our new 25-story Cal/EPA building in downtown Sacramento is serving as a precursor to and laboratory for the even more comprehensive green building technologies planned for future State office complexes. The Waste Board has been a leader in helping us acquire high-recycled-content components in our headquarters. This is a greener building because of the Waste Board's efforts. We expect our new building to be a nationwide example of 21st century green building design.

Congratulations to the Integrated Waste Management Board, and here's to the next ten years!



Table of contents

The Next Ten Years

Who We Are one Hitting the Goal Year two Local Assistance three Outreach and Public Education five Waste Prevention six Market Development eight Tires ten Used Oil Recycling eleven Household Hazardous Waste twelve Permitting and Operations twelve **Border Initiatives** fifteen

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WHO WE ARE

The Integrated Waste Management Board (IWMB) started its journey in 1990 following passage of the Integrated Waste Management Act (AB 939, Sher, Chapter 1095, Statutes of 1989). This legislation set a lofty stage for a series of statewide reforms in waste management: establishing the 50 percent diversion goal for local government, based on an integrated waste management hierarchy that prioritized waste reduction and recycling over all other options; inspiring the reduce, reuse, recycle ethic; enhancing public outreach programs and environmental curricula in schools; and improving landfill safety requirements.

Charting the course for the IWMB are its six board members; four appointed by the Governor, and one each by the Senate Rules Committee and the Speaker of the Assembly. To ensure a broad range of Board expertise, one of the Governor's appointees must have private sector experience in the waste industry and a second must have experience in the nonprofit environmental community.

Linda Moulton-Patterson board chair



Daniel Eaton board member



Steven R. Jones board member



HITTING THE GOAL YEAR

The year 2000 was the benchmark year for California cities and counties working to meet the State's 50 percent waste diversion goal set a decade ago by AB 939. The goal was a landmark and the State's effort to reach it a bellwether among statewide integrated waste management programs around the nation.

Many thought—and some still do—that cutting waste in half was too optimistic. Yet, quite a few local governments in California surpassed the goal and, as a whole, this grand experiment in changing social behavior has been a resounding success.

Surge in Diversion

Using the IWMB's most recent estimates, California diverted 42 percent of its waste from landfills in 2000. While still short of the 50 percent goal, the statewide diversion rate has jumped nine percent since 1998, a tribute to the IWMB's strategic targeting of organics and construction and demolition materials in the waste stream.



David A. Roberti board member



Michael Paparian board member



José Medina board member

In terms of sheer tonnage, waste diversion has catapulted 51 percent over this period, from 18.5 million tons diverted in 1998 to 28 million tons in 2000. In the same two-year period, waste disposal in landfills increased only 700,000 tons statewide, despite the state's burgeoning economy—proof of the public's strong embrace of a new resource conservation ethic.

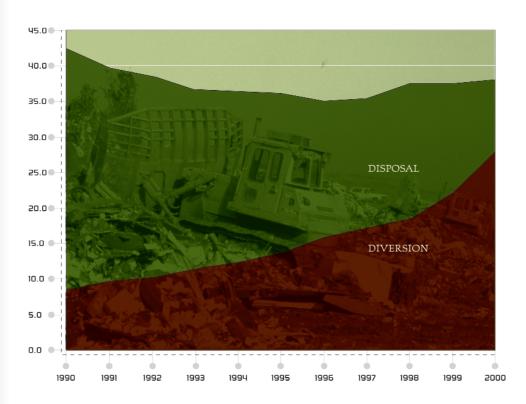
The IWMB's task of evaluating local governments' progress toward the 50 percent goal begins later in 2001 when annual reports for 2000 are due. Based on current information, some 40 to 50 percent of the jurisdictions will reach the 50 percent goal. Those that did not reach the mark in 2000 may request additional time—up to five years, but no later than January 1, 2006—if the IWMB agrees that they are continuing to make a good faith effort.

LOCAL ASSISTANCE

In 2000, the IWMB continued its efforts to assist cities and counties with achieving the diversion goal. The IWMB employed new strategies to target components of the waste stream that offer the greatest opportunity for diversion in the shortest time frame. As an example, large institutions—schools, hospitals, prisons, hotels, large office complexes, State, local and federal government agencies—can change their procurement and waste management practices to significantly reduce waste and have an immediate impact on a local government's diversion rate.

Declining Statewide Disposal

Diversion vs. Disposal in California, 1989–2000



The IWMB held regional workshops in 2000 on a variety of topics including: targeting construction and demolition wastes, implementing food scraps diversion programs, and conducting non-residential sector waste assessments and outreach.

In March 2000, the IWMB sponsored a statewide videoconference that showcased innovative and successful programs in organics reuse, recycling, and composting; construction

and demolition debris recycling and "deconstruction;" reuse programs; residential and commercial recycling; and market development. The videoconference can be viewed on the IWMB's Web site at www.ciwmb.ca.gov/LGLibrary/Innovations/.

Improving the Tool Box

Over the years, the IWMB has developed more than 100 separate tools and resources to assist local governments in their efforts to increase diversion. In 2000, the IWMB redesigned portions of its Web site for local programs, adding new tools and creating a user-friendly site with improved access to these resources. Local Government Central (www.ciwmb.ca.gov/LGCentral/) is a gateway to online assistance for analyzing the waste stream, planning and implementing diversion programs, and tracking and reporting disposal and diversion rates.

What's in Your Waste Steam?

Knowing what's in your waste stream is an essential step in designing effective programs to reduce waste disposal. Changes in California's business community and in the habits of its residents have altered the waste stream over the past 10 years. The IWMB commissioned a statewide waste characterization study in 1999 and, in 2000, added the results of the study to its Web-based tools for diversion planning (www.ciwmb.ca.gov/WasteChar/). The waste characterization database now provides information for both the residential and commercial waste streams for all jurisdictions in the state.

E-file

Each city, county, or regional agency is required to submit an annual report to the IWMB. The annual report is the outcome of two basic steps: calculating the annual diversion rate, and describing the progress the jurisdiction made in implementing the diversion programs indicated in its planning documents. Two IWMB-developed tools greatly simplify the reporting process: the online diversion rate calculator, and the model annual report with downloadable forms that jurisdictions can use to prepare their reports.

Table 1:Estimated California Solid Waste Tonnages and Diversion Rates

year	estimate statewide diversion (millions)	statewide reported disposal (millions)	estimated statewide generation (million tons)	estimated statewide diversion rate (%)
1989	5.0	44.0	49.0	10%
1990	8.5	42.4	50.9	17%
1991	9.7	39.5	49.2	20%
1992	10.2	38.4	48.6	21%
1993	11.4	36.7	48.1	24%
1994	12.4	36.3	48.7	25%
1995	13.7	36.0	49.7	28%
1996	15.9	35.0	50.9	31%
1997	17.0	35.5	52.5	32%
1998	18.5	37.4	55.9	33%
1999	22.2	37.5	59.7	37%
2000	28.0	38.1	66.1	42%

^{* 1989} estimates are based on the best available data at that time. The rise in estimated diversion and the rate of diversion from 1989 to 1990 is attributed to the acquisition of more complete and consistent data under AB 939, as well as adjustments to that data reflecting program expansion since 1989.

To make the annual reporting process faster and easier, the IWMB is developing an electronic annual reporting system that will be available for jurisdictions to use for submitting their 2000 annual reports, due by August 1, 2001. The electronic filing system will build on the online diversion rate calculator and provide improved access to jurisdiction data.

State Agency Diversion Progress

California State agencies and large State facilities are required to divert at least 25 percent of their solid waste from landfills or transformation facilities by January 1, 2002, and 50 percent by January 1, 2004 (AB 75, Strom-Martin, Chapter 764, Statutes of 1998). To assist State facilities with their plans and programs for reaching these goals, the IWMB provided a model plan, technical assistance, and educational documents for more than 400 State agency officials. By the end of 2000, the IWMB was reviewing integrated waste management plans submitted by more

OUTREACH AND PUBLIC EDUCATION

Whether it's finding new uses for waste tires, showing communities how to recycle their used motor oil, or teaching school children the value of placing their lunch scraps in worm bins for vermicomposting, public outreach and education play an essential role in virtually all of the IWMB's activities.

Reaching Out on Waste

than 450 State entities.

An integral part of the IWMB's goals and mission is the promotion of statewide public information and education activities. Local governments, schools, businesses, industry, and the public are the IWMB's audiences. They receive messages about waste prevention, reuse, recycling, and the importance of buying recycled-content products.

Throughout 2000, the IWMB promoted outreach efforts by exhibiting at a variety of expositions, fairs, community events, conferences, and trade shows. Staff distributed more than 136,600 publications and educational materials at events like the California State Fair, Earth Day, and the IWMB's own first annual Recycled Products Trade Show—the single most important market development effort aimed at promoting purchasing of recycled-content products by State agencies.

Environmental Education

Educating children creates lasting awareness of environmental issues. Focusing on students in grades K–12, the IWMB has proactively formed environmental education partnerships with a wide range of organizations to develop materials, lessons, and programs that meet the California State Standards. Some of these include:

- California Department of Education
- California Department of Forestry and Fire Protection
- California Environmental Education Interagency Network
- California Environmental Protection Agency
- California Resources Agency
- California Scope, Sequence, & Coordination Project
- K-12 Alliance
- Keep California Beautiful

Highlights in public education sponsored by the IWMB have included:

• Source reduction and recycling programs targeting more than 1,200 school districts, and instructional materials made available to 8,000 schools throughout the state to

teach the concepts of integrated waste management. In addition, IWMB staff members have presented more than 400 workshops for 5,127 educators.

•Promotion of three curricula targeting students in kindergarten through 12th grade, aligned to the new State education standards and frameworks.

 Instructional Garden Program that will award \$150,000 in grants to schools, school districts, county offices of education, and other local agencies statewide in FY 2000–01 to establish school site gardens and to incorporate agricultural, nutrition, and integrated waste management concepts into classroom instruction.

WASTE PREVENTION

t's a simple concept: reduce waste at the source—that is, prevent it from occurring in the first place—and you will use resources more efficiently, save money, and protect the environment. During 2000, the IWMB realized significant progress in its waste prevention goals to create increased public awareness, gather and disseminate information, assist local governments, encourage businesses, and provide incentives to build "green" for a sustainable future.

Business Resource Efficiency

California's approximately one million businesses drive its thriving economy and generate half of the state's waste. To prove to business and industry leaders that waste prevention makes both economic and environmental sense, the IWMB actively works to demonstrate the benefits of reducing unnecessary waste disposal and buying recycled.

The IWMB's campaign to inform California businesses about the financial and environmental benefits of waste reduction has grown to include a Web-based Waste Prevention Information Exchange database that fields up to 500 inquiries a month. The exchange is a unique collection of more than 1,000 articles, brochures, reports, videos, posters, and other materials. The IWMB also continued its efforts to help local and State agencies cut their waste by establishing the Legal Profession Paper Waste Reduction Project, an expansion of a 1999 partnership with the California Bar Association Foundation that introduced paper waste reduction to the state's legal community.

WRAP Awards Hit Record Numbers

In 2000, the IWMB awarded the largest number ever of its prestigious Waste Reduction Awards Program (WRAP) honors. The WRAP program recognized 1,898 businesses statewide in the eighth annual competition with media promotions and display materials suitable for marketing their status as WRAP winners.

The winners diverted a total of 5.6 million tons of materials from landfills, and they added \$28 million to their bottom lines with revenue from recycling and cost savings from reduced disposal fees. Additionally, 10 winning companies received WRAP of the Year honors for exemplary efforts to cut their waste and save money on disposal costs. These business success stories serve as models of resource efficiency for companies throughout the state.

WRAP of the Year Winners

Albertsons, Inc. All California stores

> Allergan, Inc. Irvine

> > Apple Elk Grove

Bentley Mills, Inc. City of Industry

> Direct Relief International Santa Barbara

I.M. David Furniture Gardena

> North Coast Cooperative, Inc. Arcata

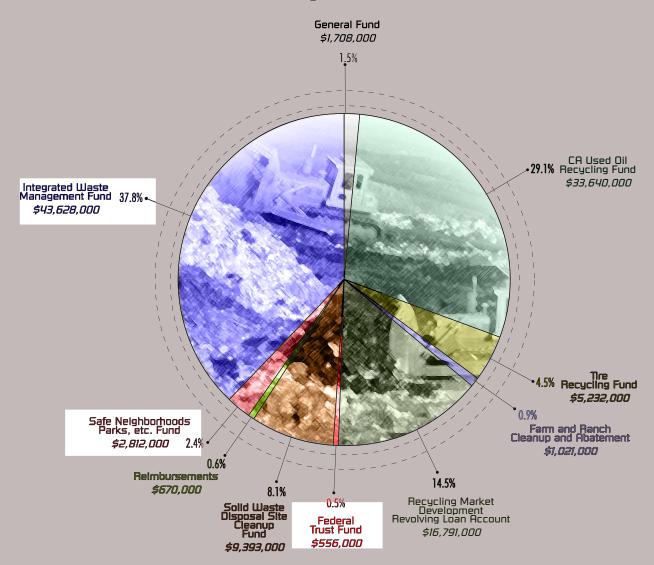
Ocean Beach People's Organic Food Market San Diego

The Westin San
Francisco Airport
Millbrae



Yosemite Concession Services Corporation Yosemite National Park

Integrated Waste Management Board Authorized Funds Totaling \$115,451,000 fy 2000-01



The IWMB's funding comes from fees on waste disposed at the state's landfills, fees on motor oil and tires sold in California, federal funds, and reimbursements.

CalMAX Creates Reuse Opportunities

With the California Materials Exchange (CalMAX) program in its ninth year, the IWMB hosted more than 1,200 active listings in its published and online catalog (www.ciwmb.ca.gov/CalMAX/). The CalMAX Web site attracted an average of nearly 10,000 "hits" a month. The "trash to treasure" theme of CalMAX creates opportunities for businesses to conserve resources, trade, sell or donate usable materials, and to make reuse work.

As an adjunct to CalMAX, the KidMAX program lets businesses list materials specifically targeted to schools. Other assistance to schools is also available. To expand the practice of reuse in the schools community, Governor Gray Davis' 2000–01 budget established a local reuse assistance grant program to encourage the business community to share its surplus materials with schools statewide.

MARKET DEVELOPMENT

For recycling and waste reduction to succeed in the long term, market demand for recycled-content products must continue to grow. Since the passage of AB 939, investments in the collection, processing, and manufacturing of recycled materials to make new products have expanded significantly. To support these investments and move toward California's year 2000 goals, the IWMB focused its efforts on the following strategic activities.

Recycling Market Development Zones

Located throughout California, the 40 Recycling Market Development Zones (RMDZ) foster economic growth and local market development for recovered materials through partnering with local government economic development and solid waste management officials. These include plastics, glass, paper, wood, compost, construction and demolition debris, and other materials. The RMDZs are home to a wide range of recycling-based businesses, many of which are recipients of low-interest loans from the IWMB. In 2000, the IWMB allocated \$10.5 million in RMDZ loans to 15 companies. The loans also helped create nearly 200 new jobs. With diversion as a key element of RMDZ successes, the IWMB's loan recipients are keeping an estimated total of 3.5 million tons of waste from landfills annually.

Organic Materials and Agriculture

Organic materials management is a top priority for the IWMB. Yard trimmings, grass clippings, wood waste, and food scraps are about 40 percent of the material going into California's landfills. Under the IWMB's leadership, communities throughout the state have made substantial investments in programs and facilities designed to reduce, reuse, and recycle organic materials. As of 2000, 56 percent of local jurisdictions were operating green material collection programs. Composting is an increasingly important part of local diversion activity, with 100 permitted composting facilities established statewide.

During 2000, the IWMB funded composting and erosion control projects with:

- City of Sacramento, in conjunction with Grover Environmental Services.
- Napa Resource Conservation District.
- Upper Valley Recycling.
- University of California, Davis.

Landscape Management

In 2000, the IWMB extended its outreach efforts to the commercial landscaping industry to promote the advantages of resource-efficient landscape management. This includes practices that reduce, reuse, or recycle yard trimmings on site. The IWMB had conducted its efforts in partnership with University of California Cooperative Extension to develop extensive fact sheets and technical guidelines for landscaping contractors and site managers.

RMDZ Loans in 2000

Stockton—Advanced Recycling
Technologies, Inc.
\$1,000,000

Vernon—Princess Paper, Inc. \$ 700,000

Gardena—Wooden Man, Inc. \$ 442,500

Lodi—Ramrock Leasing & Equipment Co. \$ 205,000

Sacramento—Dynamic Concrete
Cutting & Demolition, Inc.
\$2,000,000

Richmond—MBA Polymers, Inc.

Fresno—Paper, Pulp & Film, Inc. \$ 350,000

Spreckles/Salinas Cranford, Inc. \$ 70,000

Oakland—St.Vincent de Paul Society of Lane County, Inc. \$ 250,000

Coachella—California Biomass, Inc. \$ 306,375

Victorville—California Biomass, Inc. \$ 570,500

Camarillo—Silicon Recycling Services, Inc. \$1,600,000

Arcata—Whit McLeod Furniture \$ 195,000

Santa Cruz—K & R Products, Inc. \$1,245,000

Auburn—Pre/Plastics \$ 650,000

Total \$10,584,375

CalMAX Connection of the Year

City Farmers Nursery of San Diego was named the Eighth Annual CalMAX "Connection of the Year." The company collects and reuses wood, cardboard, metal, plastic, tires, and other salvageable items.

Since 1997, the nursery has run "wanted" listings in the CalMAX catalog for crushed rocks and gravel, 15-gallon nursery pots, and used tires.

In 2000 alone, the locally owned and operated nursery diverted more than 24 tons of crushed rocks and gravel from the landfill, saving thousands of dollars. City Farmers has used crushed rock and gravel from a local roofing company and tires from a neighboring tire store.

Owners Bill and Patty Tall use much of the crushed rocks and gravel to pave walkways, stairways, and driveways at the nursery. They've used tires for decorative purposes and in the construction of a small retaining wall, and burlap coffee bags for bagging and decor. Fifteen-gallon nursery pots from local landscape companies are reused in the nursery and given to local schools for special arts and crafts projects.



In 2000, the IWMB initiated a partnership with the Department of General Services using Capitol Park to demonstrate that resource-efficient landscaping practices are cost-effective and environmentally beneficial. The project will model the benefits of reducing green waste, conserving water, and minimizing nonpoint source pollution in urban landscapes.

Workshops, trade show exhibitions, and seminars also proved highly successful in reaching the state's green waste generators with information about sustainable landscaping practices. To promote the multiple economic and environmental benefits of waste-efficient and water-efficient landscaping practices, including grasscycling, the IWMB has established partnerships with:

- Local water and air districts.
- Professional landscapers.
- Storm water management agencies.
- Other local government entities.

Biomass Conversion Technologies

Through the 1980s and 1990s, biomass plants in California annually used as much as two million tons of organic materials as fuel. In the late '90s, deregulation in the energy industry and expired supplier contracts forced many biomass plants out of business. Recent state and federal initiatives are promoting biomass and biobased product technologies, and interest has increased in biomass and energy issues.

In 2000, the IWMB participated in an informal interagency biomass task force that included the California Air Resources Board, Energy Commission, Department of Forestry and Fire Protection, Department of Food and Agriculture, and the California Trade and Commerce Agency. Greater coordination now exists among these agencies, and the IWMB is actively assisting with such projects as Trade and Commerce's Agricultural Biomass Demonstration Grant Program.

Sustainable Building

The IWMB is one of a growing number of agencies in California and throughout the world with a commitment to sustainable building leadership. Sustainable building combines facility energy efficiency with resource conservation through the use of building products that have recycled material content as well as aggressive on-site recycling and diversion programs.

Throughout 2000, the IWMB actively supported the State's Green Building Task Force, which developed guidelines for Governor Gray Davis' Executive Order D-16-00. The Executive Order directs State agencies to site, design, deconstruct, renovate, operate, and maintain buildings that are models of energy, water, and materials efficiency.

Other sustainability initiatives by the IWMB in 2000 included incorporation of green building measures into the State's new East End Office Project (a 1.4-million-square foot building under construction near the State Capitol); developing new environmental specifications for modular office furniture purchases for State facilities; and participation in the Collaborative for High Performance Schools to address the energy and environmental needs of California's K-12 schools.



TIRES

California must safely manage more than 31 million reusable and waste tires generated annually. Another 3 million tires are imported annually and about 2 million waste tires remain stockpiled throughout the state. The number of waste tires recycled in California doubled from 1991 to 1999.

In September 2000, Governor Davis signed SB 876 (Chapter 838, Statutes of 2000) by Senator Martha Escutia and Assemblyman Dennis Cardoza, earmarking \$6.5 million annually for illegal tire site cleanup, upgrading the waste tire hauler program, stimulating market activities, and setting the charge at \$1 for each new tire sold in the state, including those on new vehicles. A five-year plan outlining the IWMB's priorities for the estimated \$30 million annual budget for the tire program will be presented to the Legislature prior to July 1, 2001.

Waste Tire Site Remediation

In October 2000, State and federal agencies completed preliminary remediation activities at the Filbin Waste Tire Site in Westley, Stanislaus County, removing 2 million unburned tires remaining at the illegal site. Cal/EPA is developing site characterization and long-term remediation plans for the site, the scene of a fire that started in September 1999 and burned some five million tires.

In December 2000, the IWMB extinguished the remaining hot spots of a 7-million tire fire started in 1998 by brush-clearing equipment at the illegal Royster Waste Tire Site near Tracy in San Joaquin County. The IWMB paid \$365,000 to help extinguish the fire with assistance from local fire and health departments.

Tire Enforcement

To date, the IWMB has prepared or referred 33 criminal complaints against tire handlers and issued 360 cleanup and abatement orders. The IWMB has also inspected 785 waste tire sites. To date, the IWMB has issued 154 administrative complaints for State waste tire regulation violations.

In 2000, the IWMB issued 74 cleanup and abatement orders and 27 abatement of waste tire/cease and desist orders. These actions caused owner/operators to remove 508,585 passenger tire equivalents from both rural and urban sites.

As a result, in 2000, the IWMB obtained:

- A \$225,000 civil judgment against a tire operator for illegally storing 280,000 scrap tires in Butte County.
- A \$310,500 fine against an operator for stockpiling 230,000 tires unlawfully in unsecured trailers in Stanislaus County.
- A \$300,000 penalty against a waste tire hauler for dumping 200,000 tires in Los Angeles County.

As a result of enforcement actions by the IWMB, property owners and operators have removed nearly 5.8 million illegally stored tires since 1994. Another 11.2 million tires have been removed by the IWMB's remediation program.

IWMB Fines Hauler of Illegal Tire Pile

Although most tire haulers operate legitimately, some don't.

In January 2000 the IWMB won a \$300,000 administrative fine against a tire hauler who illegally stockpiled more than 200,000 tires outside the community of Littlerock, Los Angeles County.

A passer-by reported the pile, as long as a football field and stacked six feet high in places. The company had led the landowner to believe that the lot would be used to store only vehicles.

New Uses for Old Tires

In May 2000 the IWMB approved more than \$1 million in grants for tire-based playground safety mats and running tracks in cities around the state.

Playground safety mats and repaved running tracks made from scrap tires have long-lasting, pliant surfaces that reduce injuries.

In June 2000 the IWMB awarded two grants for \$235,000 to complete badly needed roadway repairs and improvements in Kings and Los Angeles counties using rubberized asphalt concrete (RAC), a superior road surface that affords improved traction, longevity, and marking contrast when properly applied.



Tire Cleanup/ Enforcement Grants

In May 2000, the IWMB approved \$499,645 in waste tire enforcement grants to help city and county agencies survey tire facilities in several localities around California.

The IWMB also approved \$112,814 in local government waste tire cleanup grants that month to help clean up more than 150,000 illegally dumped tires. Part of this money—\$75,000—helped remove a large cache of 145,000 tires on the Soboda Indian Reservation in Riverside County.

The money bolstered facility inspection efforts in Butte, Imperial, Los Angeles, Sutter, Tulare, and Yuba counties, as well as in the cities of Pittsburg, San Bernardino, and San Diego.

Cleanup and Enforcement Grants

The IWMB encourages partnerships with local governments in the effort to enforce the State's tire regulations and clean up legacy tire piles. In 2000, the IWMB approved \$612,459 in cleanup and enforcement grants to help local agencies deal with waste tires in their jurisdictions.

Tire Recycling And Market Development

The tire recycling rate in California increased from 34 percent in 1990 to nearly 65 percent in 1999. Today, California's waste tires produce crumb rubber for new products like playground mats and are recycled into rubberized asphalt concrete (RAC), used in civil engineering applications, or combusted as fuel.

The IWMB has invested \$11.6 million in market development efforts to increase waste tire diversion since 1990.

USED OIL RECYCLING

One out of every four households change its own oil. The IWMB's used oil recycling program encourages motorists to "close the recycling loop" by turning in used motor oil and using re-refined oil in their vehicles. This allows motorists to help protect the environment by properly disposing automotive lubricants and by purchasing replacement fluids that don't require virgin resources to produce.

Funded by a 16-cent surcharge on every gallon of automotive lubricating oil sold in the state, the used oil recycling program was created in 1992. Through a

collection infrastructure, financial support, and outreach efforts—all created in partnership with local government—the program helped recycle nearly 90 million gallons of used oil in 2000.

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In 2000, amateur mechanics purchased 34 million gallons of motor oil. Due to normal oil consumption from driving, the public generated 22 million gallons of used oil. Used lubricating oil recycling in the state has risen from 57 million gallons in 1996 to 70 million gallons in 2000.

Collection Efforts

In 2000, California had 2,600 certified used oil centers, hundreds of oil drop-off sites, and 70 curbside programs. Customers can leave used oil supplies at collection centers and receive a 4-cents-per-quart rebate. In 2000, collection efforts diverted 8 million gallons of used oil from the public.

Financial Assistance

The IWMB awards more than \$11 million in annual block grants to cities and counties for used oil collection and outreach efforts that serve virtually all Californians. Also in 2000, opportunity grants to local governments (\$6.4 million) and nonprofit organizations (\$3.4 million) supported efforts to increase recycling and curb the improper disposal of used oil.

Public Outreach

In 2000, the IWMB focused outreach strategies at venues rich in do-it-yourselfers. Outreach efforts were conducted at the three major auto racetracks and other venues, such as sporting events, regional and statewide farm shows, and auto-related shows.

Cooperative outreach with the Department of Motor Vehicles, the California Coastal Commission, and the Department of Parks and Recreation also targeted oil recycling messages to motorists, boaters, and off-road vehicle users.

New Initiatives

The IWMB targeted used oil messages to three new core groups: independent truckers, farmers, and farm workers. Agricultural operations generate large volumes of used oil, and many farms and ranches are located in remote areas. The IWMB may pursue legislative changes allowing agriculture oil collectors to accept greater quantities of lubricants.

The IWMB plans to encourage more point-of-purchase signage in retail stores to motivate consumers to recycle used motor oil.

HOUSEHOLD HAZARDOUS WASTE

Statute requires household hazardous wastes (HHW) be kept out of California's solid waste stream. The IWMB supports local collection programs by providing educational and technical assistance in this effort, and it awards grants for collection centers where the public can turn in paint, lubricants, fuels, pesticides, household chemicals, and old batteries.

In 2000, the IWMB awarded local governmental agencies \$3 million for permanent HHW collection centers and service in outlying areas and to improve collection programs.

Collection Efforts

In 2000, California operated 85 permanent HHW collection centers, 245 temporary facilities or events, and 107 recycle-only sites. Up to 90 percent of the state has access to HHW collection options. Local government expenditure for all HHW programs in California exceeded \$25 million in 2000.

In fiscal year 1999–2000, local governmental agencies in the state collected 39 million pounds of HHW. Paints accounted for more than 40 percent of that total and almost one-third of local HHW program expenses. The IWMB initiated a study of waste paint management in 2000 and is developing a legislative proposal to support local collection efforts and bolster procurement of recycled latex paints.

New Initiatives

The IWMB is monitoring HHW product stewardship in other states and countries, along with extended producer responsibility initiatives to address such problems in a holistic manner.

The IWMB met with the Department of Toxic Substances Control to draft regulations on universal and electronic wastes. Universal waste is any hazardous waste prevalent in the solid waste stream. Electronic waste includes computers, televisions, and other electronic equipment, where toxic components—such as lead and mercury—are present.

PERMITTING AND OPERATIONS

The Integrated Waste Management Act mandates diversion of recyclable materials from the waste stream and the safe handling and disposal of all nonhazardous solid waste. The IWMB, in partnership with local governmental agencies, is responsible for regulating the operations of solid waste facilities and administers remediation programs for orphaned, illegal, and abandoned dump sites.

Environmental Performance of Solid Waste Landfills

In 2000, the IWMB embarked on an initiative to evaluate all programs, procedures, policies, and standards related to its statutory authority and responsibilities, with a

Los Angeles Stormwater Project

In November 2000, the IWMB approved a \$584,136 grant that the City of Los Angeles matched to clean up storm drain outfall sites at 6th and 8th streets, two major sources of pollution in the Los Angeles River.

Wastes from food processing, commercial, and transportation-related businesses accumulated at the sites. These wastes, added to those of an estimated 3,000 homeless people living upstream of the drains, flow downstream to beaches, urban streams, and wetlands.

With the grant funds, the Los Angeles Stormwater Division (LASD) is installing systems to remove any accumulated wastes within 1,000 feet of commercial and industrial properties and the Los Angeles River.

The total cleanup project cost is estimated to top \$1.4 million.



priority on public health and environmental safety. In May, the IWMB commissioned a cross-media study of municipal solid waste landfills to collect data on California disposal sites, their environmental control systems, and compliance performance, and to assess the effectiveness of current regulations in controlling environmental impacts over time. In addition to the IWMB's comprehensive program review, this study, which will be completed by May 2002, will help address criticism of landfill permitting and enforcement that was levied by the Bureau of State Audits in December 2000.

COUNTY ACCELERATED

BIC COMPOSTING PROJECT

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Watts in Our Waste

Half of California's 275 solid waste facilities have landfill gas control systems. Sixty have gas recovery systems generating 154 million cubic feet per day—enough gas to power approximately 200,000 homes (250 MW). In November 2000, the IWMB expanded efforts to use these systems in response to California's spreading energy challenge.

Operations and Enforcement

Local enforcement agencies (LEA) permit and inspect landfills, transfer stations, composting operations, material recovery sites, and transformation facilities. These local government agencies—trained and certified by the IWMB —issue citations and penalties, and they require corrective actions in accordance with State and federal regulations and local ordinances. In 2000, the IWMB supported the LEAs with training, database information, conferences, and financial aid programs.

Inventory of Solid Waste Facilities Not in Compliance

er at 530-757-557 Only 17 landfills remained on the IWMB's inventory of noncompliant facilities in 2000, down 64 percent from 47 sites in 1997. These are landfills that violated State minimum standards for at least two consecutive months and failed to correct the violations within 90 days of being notified. The number of sites listed for long-term violations of landfill gas control requirements is down 48 percent, from 23 to 10 over the same period.

Closed, Illegal, and Abandoned Waste Disposal Sites

Landfill trash generates gases and leachate, sometimes for as long as 200 years, requiring closure and maintenance plans to protect the environment and the public. Illegal and abandoned dump sites pose added risks—exposed waste, leachate, landfill gas, vectors, hazardous materials—and their owners often cannot be found. Illegal and abandoned sites next to schools and low-income and minority neighborhoods raise public health and environmental justice concerns.

In 2000, IWMB staff reviewed 39 final closure plans, 21 preliminary closure plans, nine closure certifications, and 18 remediation plans. IWMB staff reviewed eight post-closure land use plans. The IWMB also documented the existence of 2,675 closed, illegal, and abandoned dump sites; two-thirds lack adequate preliminary assessment and enforcement work.



Cleanup

In 2000, the IWMB approved \$4.4 million through its solid waste disposal site cleanup program (AB 2136, Eastin, Chapter 665, Statutes of 1993) for 16 projects that will assist local enforcement agencies in cleaning up more than 30 sites.

The IWMB's disposal site cleanup program completed 11 projects that eliminated more than 20 separate sites. The program helped dispose more than 6,700 tons of solid waste and 14 tons of hazardous wastes and recycled more than 80 tons of scrap tires, 310 tons of metal, and 1,500 tons of wood, returning 96 acres to beneficial reuse.

Funded by landfill tipping fees, the program is used when a responsible party cannot be identified or is unable/unwilling to clean up a site in a timely manner. In January 2000, new legislation added flexibility in awarding cleanup grants and loans.

Farm and Ranch Solid Waste Cleanup

In fiscal year 1999–2000, the IWMB's farm and ranch cleanup and abatement grant program cleaned up 37 rural sites at a cost of \$172,342. Authorized by the Legislature in 1997 (SB 1330, Lockyer, Chapter 875, Statutes of 1997), the program allows rural property owners to petition their local governmental offices for financial assistance from the IWMB to remove trash illegally dumped on their lands. The local agency must determine that the petitioning landowner is not responsible for the material being removed.

Operator Training and Certification

The IWMB partnered in 2000 with the Solid Waste Association of North America (SWANA) for a California-specific training curriculum for operators of solid waste landfills. In 2001, in partnership with other organizations, the IWMB will offer a series of workshops on enforcement of State Minimum Standards.

Bioreactor Landfill Technology

The IWMB committed \$400,000 in June 2000 to support a full-scale landfill bioreactor pilot project at the Yolo County Landfill. Bioreactor landfills accelerate the natural decomposition process and provide methane gas to generate electricity while reducing atmospheric greenhouse gases through a system of controlled leachate recirculation, gas collection, and energy recovery. The method can significantly increase landfill capacity. A report on the pilot will be available in July 2001.

Composting Facilities

In 2000, the IWMB continued research with California Polytechnic Institute to develop resource guides for California's composting industry. The research studied odor problems and bioaerosol levels associated with such operations. More than 30 percent of the state's waste stream is compostable organic material.

BORDER INITIATIVES

In 2000, the IWMB addressed environmental impacts in the U.S.-Mexican border region in a number of areas.

• IWMB staff plays a key role in the Border Environment Program as part of the Cal/EPA Border Affairs Unit. Additional information on the Border Program is available at http://bep.calepa.ca.gov/.

• A partnership between Cal/EPA and the Secretariat of Education for Baja California helped train 280 Mexican teachers in the IWMB's integrated waste management curriculum "Closing the Loop" (Spanish-language version).

 IWMB staff provided technical assistance to the City of Tijuana in its efforts to site a new landfill. The existing Tijuana Landfill is expected to reach capacity in 2002.

 In March 2000, IWMB staff initiated formal discussion with Mexican used tire haulers on cross-border concerns related to existing and proposed regulatory requirements in California.

THE NEXT TEN YEARS

Senator Byron Sher had a clear vision when, in 1989, he authored legislation creating the IWMB and the framework for California's new integrated waste management infrastructure.

Then and now, some believe the 50 percent diversion goal is too aggressive and too costly; still others believe that our goal should be zero waste. No matter what we believe individually, all Californians must be proud of our accomplishments.

As we near the goal, we must be certain that we sustain our achievements. To do this, we must focus on changing not only our actions, but also our very understanding about resources. Waste is a resource that we are using inefficiently. By being more efficient with our resources, we will reduce waste.

The IWMB is looking to the future and will be updating its Strategic Plan in 2001. Key elements of the plan will be sustainability, product stewardship, and energy recovery. To the IWMB, sustainability means "creating economic, ecological, and social prosperity while ensuring that future generations will have the same opportunity to create their own prosperity."

The IWMB is committed to working with its partners to develop a future modeled on resource stewardship and waste minimization. In this partnership, the IWMB, local government, private businesses, and product manufacturers will collaborate to develop sustainable markets for resources diverted from the California waste stream. The partnership will also promote and exercise product stewardship, address environmental justice, minimize pollution and waste generation, and safely manage unavoidable discards.

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energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you reduce demand and cut your energy costs, see our Web site at www.ciwmb.ca.gov.